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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/782,406	02/18/2004	Douglas H. Polumbaum	02354/100M483-US1	4344

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EXAMINER

GABLER, PHILIP FRANCIS

ART UNIT

PAPER NUMBER

3637

DATE MAILED: 05/03/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/782,406	Applicant(s) POLUMBAUM, DOUGLAS H.	
	Examiner Philip Gabler	Art Unit 3637	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 March 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 16-36 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 16-36 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 July 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. Applicant's election without traverse of group I (Figures 1-6 and 17-24) in the reply filed on 13 March 2006 is acknowledged.

Claim Objections

2. Claim 16 is objected to because of the following informalities: the word "attach" on line 16 of the claim should be "attaching." Appropriate correction is required.
3. Claim 17 is objected to because of the following informalities: the word "comprises" on line 2 of the claim should be "comprise." Appropriate correction is required.
4. Claim 28 is objected to because of the following informalities: it is grammatically incorrect (the word "are" should be replaced with "is" for example). Appropriate correction is required.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
6. Claims 16-20, 22, 24-29, and 34-36 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

7. Claims 16 and 34 recite "one or more interlocking features" on line 5 of the claim.

Because "one or more" is a positive recitation of only a single feature, but the word feature is in the plural (both on line 5 and line 9), it is unclear whether a single or multiple interlocking features are intended.

8. Regarding claim 22, it is unclear whether the "plurality of notches" of line 2 of the claim is a reference to the interlocking features of claim 21 or a new and separate limitation. For examination purposes, the notches were assumed to be the interlocking features.

9. Regarding claim 26, it is unclear whether the "second locking features" of line 4 of the claim is a reference to the second interlocking features of claim 21 or a new and separate limitation (note that no first locking features have been recited). For examination purposes, the second locking features were assumed to be the second interlocking features.

10. Claims 17-20, 24, 25, 27-29, 35, and 36 are deemed indefinite as being dependent on an indefinite claim.

Claim Rejections - 35 USC § 102

11. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

12. Claims 16-20 and 34-36, as best understood, are rejected under 35

U.S.C. 102(b) as being anticipated by Kundikoff (US Patent Number 3108729).

Kundikoff (Figures 1 and 2) discloses a pallet kit formed of a number of individual support members that are engageable with one another to form a support pallet, the kit comprising: a plurality of individual pallet support members (30) that are arranged in an interlocking manner to form the support pallet, wherein each pallet support member has one or more interlocking features (48, 50, 52) that permit each pallet support member to mate with one or more other pallet support member in an interlocking manner, the pallet support members being mated together by orientating the pallet support members in a grid-like pattern with the features aligned and then two pallet support members are interlocked with respect to one another by inserting one pallet support member into features of another pallet support member such that the two pallet support members are effectively interlocked with respect to one another, wherein each end of the support members includes a first locking feature (36, 38, 40, 42, 44, 46); and a locking member (10) that is configured to mate with the first locking features so as to result in the locking member being disposed around a border of the pallet for enclosing sides of the pallet, the locking member having a second locking feature (18, 20) and a complementary receiving feature (holes receiving 20) that mates therewith for securely attaching the locking member around the pallet.

13. Regarding claim 17, Kundikoff further discloses the interlocking features of each pallet support member comprise a plurality of notches that are formed at predetermined locations along the length of each pallet support member (see figures).

14. Regarding claim 18, Kundikoff further discloses the first locking features are in the form of locking tabs (formed in 36, 38) that mate with complementary openings (22) formed through the locking member.

15. Regarding claim 19, Kundikoff further discloses the locking member is an elongated structure in an open position (not shown, but would be such a structure when unfolded) that is bendable about a plurality of hinge folds (at corners/edges of member) formed therein to define side wall sections (14, 16) of the locking member, the second locking feature being a second locking tab (20) formed at one end of the elongated structure and the receiving feature is in the form of a slit (slit receiving 20) that frictionally receives the second locking tab.

16. Regarding claim 20, Kundikoff further discloses the locking member includes a plurality of openings (two openings would be present for each tab 20) formed therethrough for receiving and mating with the locking features.

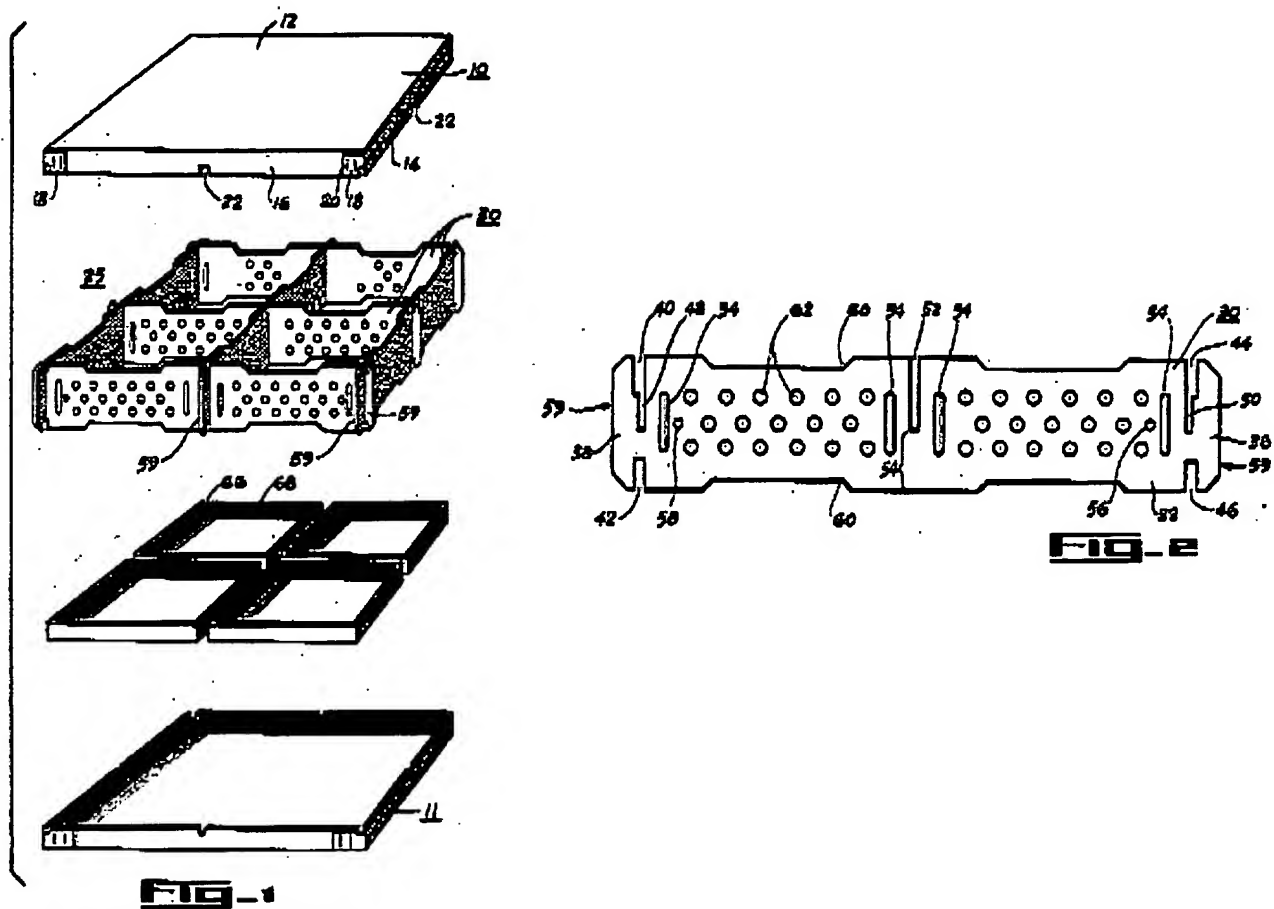
17. Regarding claim 34, Kundikoff discloses a pallet kit formed of a number of individual support members that are engageable with one another to form a support pallet, the kit comprising: a plurality of individual pallet support members (30) that are arranged in an interlocking manner to form the support pallet, wherein each pallet support member has one or more interlocking features (48, 50, 52) that permit each pallet support member to mate with one or more other pallet support member in an interlocking manner, the pallet support members being mated together by orientating the pallet support members in a grid-like pattern with the features aligned and then two pallet support members are interlocked with respect to one another by inserting one

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pallet support member into features of another pallet support member such that the two pallet support members are effectively interlocked with respect to one another; and a foldable locking member (10) that is configured to be disposed around a border of the pallet for enclosing sides of the pallet, the locking member having a locking feature (22 and surrounding area) that permits it to be secured around the border of the pallet, the locking member having fold lines (at corners/edges of the member) that could permit the locking member to be folded into a member having reduced dimensions to permit easy storage thereof (the sides of the member could be collapsed against surface of the member to reduce its storage dimensions).

18. Regarding claim 35, Kundikoff further discloses each end of the support members includes a first locking feature (36, 38, 40, 42, 44, 46) and the locking feature of the locking member includes a complementary receiving feature (22) that mates with the first locking feature for securely attaching the locking member around the pallet border.

19. Regarding claim 36, Kundikoff further discloses the first locking feature is a shaped protrusion (area of 36, 38 beyond 40, 42, 44, 46) associated with the pallet support member and the receiving feature comprises a slot for receiving the shaped protrusion.



Kundikoff '729 Figures 1 and 2

Claim Rejections - 35 USC § 103

20. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

21. Claims 21-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kundikoff in view of Christie (US Patent Number 5094175). Kundikoff discloses a pallet

kit formed of a number of individual support members that are engageable with one another to form a support pallet, the kit comprising: a plurality of individual pallet support members (30) that are arranged in an interlocking manner to form the support pallet, wherein each pallet support member has one or more interlocking features (48, 50, 52) that permit each pallet support member to mate with one or more other pallet support member in an interlocking manner, the pallet support members being mated together by orientating the pallet support members in a grid-like pattern with the features aligned and then two pallet support members are interlocked with respect to one another by inserting one pallet support member into features of another pallet support member such that the two pallet support members are effectively interlocked with respect to one another, wherein at least one pallet support member includes a second interlocking feature (56) formed in an end thereof, but does not disclose a pallet connector. Christie (Figures 8 and 9) discloses a pallet kit including a pallet connector (20a) configured to be received in an interlocking feature for coupling one pallet (40) to another pallet (see Figure 8). Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to couple a pair of Kundikoff's pallets with a connector as taught by Christie because this would allow for a larger pallet with more storage area if such was desired by a user. [Note that Christie's connector would be rotated 90° from its position in Christie's assembly for use with Kundikoff's pallets.]

22. Regarding claim 22, as best understood, Kundikoff further discloses each pallet support member is in the form of an elongated beam that has a plurality of notches (48, 50, 52) formed in one face thereof at spaced intervals, each notch representing an

interface point between one upper pallet support member and one lower pallet support member.

23. Regarding claim 23, Kundikoff further discloses the second interlocking feature is formed in a plane that is at a right angle to a plane of each of the first interlocking features (at least in that engagement of the feature takes place in a horizontal plane).

24. Regarding claim 24, as best understood, Kundikoff further discloses each pallet support member has a pair of second interlocking features (56, 58) formed at ends thereof.

25. Regarding claim 25, as best understood, Kundikoff further discloses when two pallet support members are mated together in outermost first interlocking features closest to the ends, a vertical wall (lateral edge of 56) defining a floor of the second interlocking feature is spaced from the two interlocked pallet support members.

26. Regarding claim 26, as best understood, Kundikoff, when modified by Christie as described above, discloses the pallet connector is a separate element from the pallet support members and is defined by a body having a pair of third interlocking features (Christie's elements 26) that are complementary to the second interlocking features and designed to be capable of mating with second interlocking features associated with two separate assembled pallets to couple and interlock the two pallets together.

27. Regarding claim 27, as best understood, Kundikoff, when modified by Christie as described above, discloses the pallet connector lies in a plane that is at a right angle to a plane containing the pallet support member to which the pallet connector is mated (the connector lying in a horizontal plane, the pallet support member in a vertical plane).

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28. Regarding claim 28, as best understood, Kundikoff, when modified by Christie as described above, discloses the pair of third interlocking features is formed opposite one another in the connector body (see figures).

29. Regarding claim 29, as best understood, Kundikoff, when modified by Christie as described above, discloses the pallet connector lies in a plane that is at a right angle to a plane containing the pallet support member to which one edge of the pallet connector is mated and to a second plane containing another pallet support member to which another edge of the pallet connector is mated (the connector lying in a horizontal plane, the pallet support members in vertical planes).

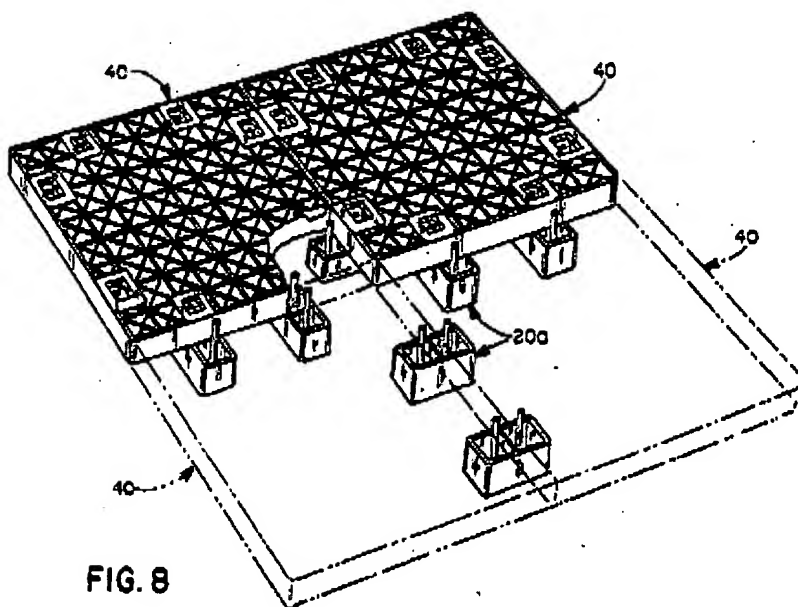


FIG. 8

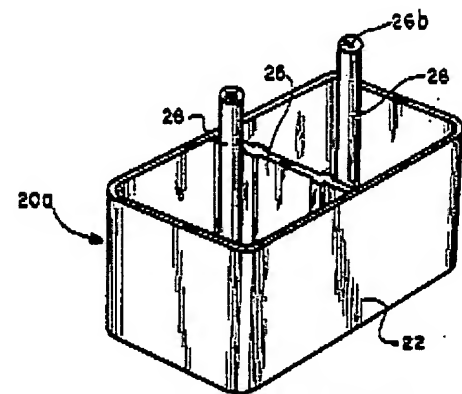
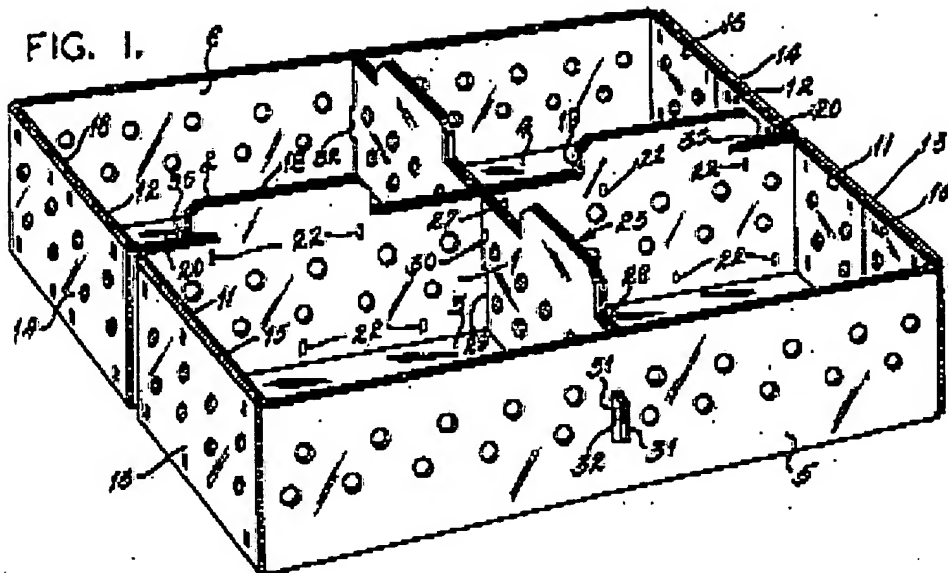


FIG. 9

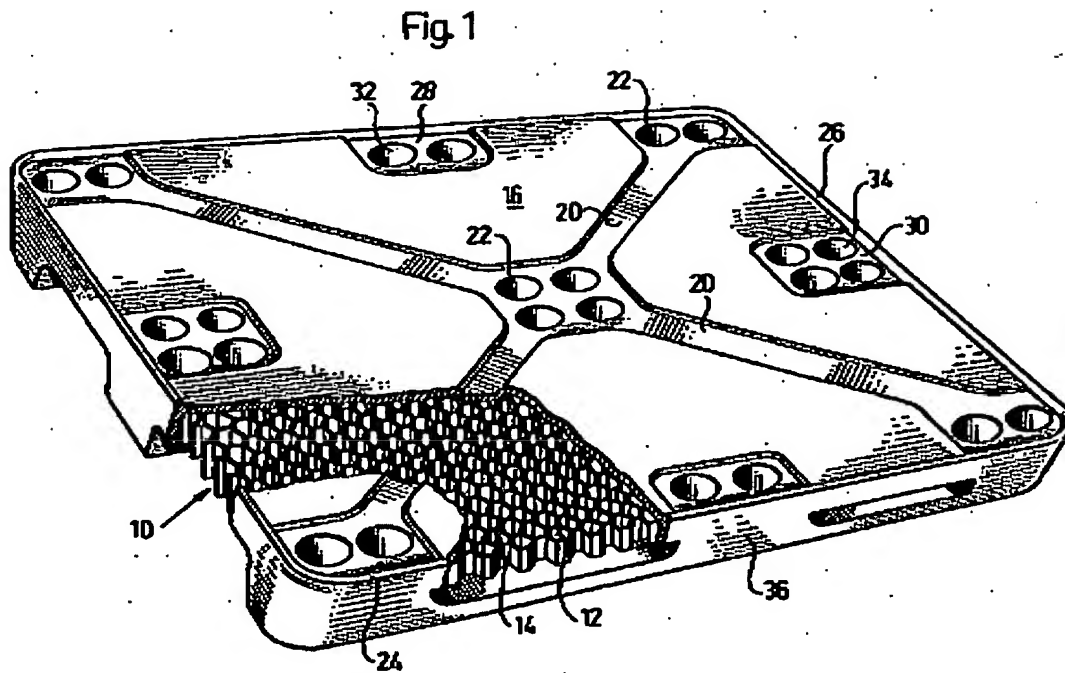
Christie '175 Figures 8 and 9

30. Claims 30 and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kundikoff in view of Christie and further in view of Moore (US Patent Number 2736483). Kundikoff, when modified by Christie as described above, discloses a pallet kit as recited in claim 21 (including the use of cardboard or plastic for the members, column 2 lines 51-52) but does not specifically disclose opposing side walls with a reinforcing structure for his pallet support members. Moore (Figure 1) discloses pallet kit with a pallet support member (23) including a pair of opposing side walls in which a first interlocking feature (29) is formed and a reinforcing structure formed between the side walls to define a number of hollow cavities in the pallet support member, wherein the reinforcing structure comprises a ribbon shaped structure that is secured to the side walls in an alternating manner. [Moore discloses the use of corrugated cardboard for construction of the pallet support member, which would have a pair of side walls with a ribbon shaped structure between. See for example column 2 lines 29-20.] Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include opposing side walls with a reinforcing structure in the construction of Kundikoff's pallet support members as taught by Moore because of the additional strength and rigidity this would provide the members.



Moore '483 Figure 1

31. Claim 31 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kundikoff in view of Christie and Moore, and further in view of Melin et al. (US Patent Number 5205221). Kundikoff, when modified by Christie and Moore as described above, discloses a pallet kit as recited in claim 30 but does not disclose a honeycomb structure. Melin (Figure 1) discloses a pallet with a honeycomb reinforcing structure (10). Accordingly, it would have been obvious to incorporate a honeycomb reinforcing structure as taught by Melin in Kundikoff's pallet, previously modified by Christie and Moore, because of the desirable strength to weight ratio such a structure would allow.



32. Claim 33 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kundikoff in view of Christie and Moore, and further in view of Schrage (US Patent Number 5365859). Kundikoff, when modified by Christie and Moore as described above, discloses a pallet kit as recited in claim 30 but does not disclose reinforcing structure in the form of indicia associated with the pallet. Christie (in his Figure 8) discloses reinforcing structure in the form of letters (the letters T, X, and V, for example). Further, it is well known in the art to include indicia on pallets as evidenced by Schrage's disclosure (column 3 lines 16-18). Accordingly, it would have been obvious to incorporate reinforcing structure in the form of letters and/or numbers representing indicia as taught by Christie and Schrage in Kundikoff's pallet, previously

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modified by Christie and Moore, based on the needs and desires of a user to display information.

Conclusion

33. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The Chilcutt (US Patent Number 6155181), Flanagan et al. (US Patent Number 6050419), Haywood et al. (US Patent Number 5484241), and Brown (US Patent Number 2925947) references are cited for disclosing various aspects of the invention of the instant application.

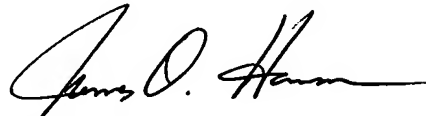
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Philip Gabler whose telephone number is (571) 272-6038. The examiner can normally be reached on Monday through Friday, 8:30 AM to 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lanna Mai can be reached on (571) 272-6867. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

PFG/*AD*
4/26/2006


JAMES O. HANSEN
PRIMARY EXAMINER